SOME TRIVIAL AMERICAN FORMS OF THE LADY-FERN

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Most of the so-called "varieties" of Athyrium Filix-femina (including A. angustum (Willd.) Presl and A. asplenioides (Michx.) Desv.) have already been properly transferred to formal rank but the few which follow seem to require such transfer. My apology for so treating them will be found in the discussion below.

ATHYRIUM FILIX-FEMINA (L.) Roth, var. MICHAUXII (Spreng.) Farwell, forma laurentianum (Butters), stat. nov. A. angustum (Willd.) Presl, var. laurentianum Butters in Rhodora, xix. 194 (1917).

A. Filix-femina, var. Michauxii, forma confertum (Butters), comb. nov. A. angustum, forma confertum Butters, l. c. 195 (1917). A. angustum, var. confertum (Butters) C. S. & W. F. Lewis in Am. Fern. Journ. xi. 83 (1921).

A. FILIX-FEMINA, var. MICHAUXII, forma laciniatum (Butters), comb. nov. A. angustum, forma laciniatum Butters, l. c. (1917).

A. FILIX-FEMINA, var. ASPLENIOIDES (Michx.) Farwell, forma subtripinnatum (Butters), comb. nov. A. asplenioides (Michx.) Desv., forma subtripinnatum Butters, l. c. 190 (1917).

For once I fully agree with the late O. A. Farwell, who reduced Athyrium angustum and A. asplenioides to varietal rank under A. Filix-femina. It seems to me quite impossible to keep apart on any stable morphological characters the circumboreal Athyrium Filix-femina and its two commoner eastern American representatives, A. angustum and A. asplenioides. Attempts to keep apart the two latter in the area where their ranges overlap are futile, this difficulty already noted by Weatherby in Am. Fern. Journ. xxvi. 134 (1936), where, considerately maintaining the three species recognized by Butters (A. Filix-femina, angustum and asplenioides), he wrote as follows:

But his three species are very closely related, often much alike in general aspect and not always easy to distinguish. The two of eastern North America [i. e. A. angustum and A. asplenioides, for A. Filix-femina, either typical or as var. sitchense Rupr. grows on the Gaspé Peninsula and in Newfoundland as well as elsewhere in the East] are comparatively readily recognizable in the north and in the south where each is the exclusive occupant of its area; but in the region from southern New England to about the Potomac valley, where both

occur, they intergrade freely and in most perplexing fashion. All three would perhaps be better treated as geographic varieties of a single species, roughly analogous to those of *Cystopteris fragilis*.

In this connection it is significant that the indusia shown by Butters, l. c., in his plate 123 and in his figs. 3C and 5A and B, for Athyrium Filix-femina are rather extreme. The figures of European indusia given by Schkuhr in his Kryptogamische Gewächse, t. 58, by Hooker fil. in his British Ferns, t. 35, by Britten in his European Ferns (colored plate opp. p. 131) and by many others are reminiscent of indusia of A. angustum. Furthermore, when he made his study of the group, or later, in checking identifications in 1932, Butters clearly wrote on a few sheets from eastern Canada and Maine such notes as "This appears to be true European A. Filix-femina—F. K. B.", such embarrassing specimens coming from the Mingan Islands and Lake St. John, Quebec, and from Mt. Desert Island, Maine. The Mingan sheet (Victorin & Rolland, no. 24,616) had been distributed as A. angustum, var. laurentianum. The latter anomalous plant in its compact and often strongly ascending rhizome and its very short lower pinnae is superficially so close an imitation of small European plants that it is most difficult to view it as belonging to a separate species. In fact, when real pteridologists (to which highly specialized brotherhood I hardly belong) got hold of this form they wrote (Weatherby & Adams, List Vasc. Pl. Grand Manan—Contrib. Gray Herb. no. clviii. 21 (1945)) under Athyrium angustum: "Most of the specimens seen belong to the form distinguished as var. LAURENTIANUM Butters. Here they tend to be rather strongly cespitose, the stipes short and the blades conspicuously narrowed toward the base, thus approximating in appearance true A. Filix-femina of Europe." I fully concur, and only on very plastic characters can such plants be kept apart from European material. In 1932 Butters evidently thought so.

In Europe many scores of trivial forms have been treated as "varieties", but in Hedwigia, xlv. 119–123 (1906), Goldschmidt treated them as subvarieties and forms. This sane course is approved by Bergdolt in Hegi, Ill. Fl. Mitteleur. i. 48, he saying "Alle diese Varietäten werden noch in zahlreiche Subvarietäten und Formen aufgeteilt". In view of the great diversity of forms

assumed by the Lady-fern, the suggestion of the late James Britten (a crusty bachelor) that, in transferring the name Filix-femina from the bracken to the present species, Linnaeus perhaps had in mind the French proverb "Souvent femme varie", etc., is pertinent (or impertinent)!

Centaurea Maculosa in Indiana.—According to Deam in his "Flora of Indiana", A. A. Hansen reported this species as a weed near Atlanta in Hamilton Co., near the center of the state (Proc. Ind. Acad. Sci. 36: 251. 1927). Deam, although listing the plant in his "excluded species", states that it may become established soon if it has not already done so. Later, E. E. Sherff (Rhodora 48: 98. 1946) takes note of Deam's remarks, and states that this species seems thoroughly established in adjacent southern Michigan.

September 22, 1941 I found a solitary plant on Route 20 in Porter Co., approximately 20 miles from the Michigan boundary. In a subsequent year I found another single plant on the same road, same county, about a mile west from the first. This region I looked over thoroughly in 1946, but no plants were found. August 27, 1946 I found several plants in the locality where the first was seen, apparently well established and able to compete successfully with any roadside weeds.

Specimens have been sent to the Gray Herbarium.—Edwin D. Hull, Gary, Indiana.

Setaria Faberii in North Carolina.—In the interest of tracing the rather rapid spread of the Asiatic grass, Setaria Faberii Herrm., in North America, it may be worth while to record this species for the first time in North Carolina. On August 5, 1946, while driving northwestward across the piedmont of North Carolina, I happened to glimpse the characteristic panicles of S. Faberii along Route 54 at Cane Creek in Orange County. Stopping to collect material, I found many scattered plants of the grass in a weedy roadside field with abundant Lespedeza stipulacea, the latter presumably planted intentionally and the former possibly introduced at that time.